PART IN-512 - CONSTRUCTION

SUBPART F - AS-BUILT PLANS

IN-512.51 (b) Requirements for As-Built Drawings for Class I to IV Structures

- (1) Structural and/or dimensional changes made in a conduit, drainage system, cutoff trench, foundation preparation, embankment zoning, geotextile material, outlet pipes, or any structural element that will not be visible following the completion of the project must be illustrated in detail to provide a complete, legible, and true record of the final As-Built conditions.
 - (Examples: Changes to depth, size, and material types in a pipeline system or cutoff trench dimensions and anti-seep collar locations in a pond dam)
- (2) As-Built drawings or notes will not be required for features that are readily visible after construction if constructed to the approved construction tolerances outlined in the Indiana construction specifications. In addition, no signature will be required on the cover sheet to indicate approval of the As-Built drawings and/or notes. The IN-ENG-57 cover sheet should be marked to indicate no changes were made during construction. Proper construction check out and survey documentation are still required on all construction.
 - (Examples: Finished grade and cross-sections of a grassed waterway or top of dam elevations and dam cross-sections.)
- (3) As-Built plans shall be completed on Class I-IV jobs when required by another agency of government.
 - (Example: Stream bank stabilization project which required a construction in a floodway permit from the Indiana Department of Natural Resources Division of Water)

IN-512.52 (a) Recording Changes

- (6) Specific Requirements
 - (i) Portions of work performed under separate contracts shall be shown on the drawings for the primary contract, and/or separate sheets inserted into the as-built plans for the primary contract. Areas of seeding for different seed-fertilizer-mulch combinations shall be identified and delineated on the site map and/or plan sheet.
 - (ii) When new sheets are drafted, the original blueline sheet shall be marked "Void" and included in the set sent to the state office.
 - (iii) Final contract quantities shall be shown next to the corresponding estimated quantity. Where varying concrete strengths are accepted, indicate the quantity, strength, and location on the detail drawings for the portion of the structure involved.
 - (iv) The location of installed survey markers in accordance of IN-540.07 will be noted on the asbuilt drawings. The description of the survey markers, and their elevations shall be shown on the drawings.

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- (v) Joint gap measurements, and dates the measurements were taken, shall be recorded on the principal spillway layout as-built drawing for all articulated conduit structures 30 inches in diameter and larger. Joint gap measurements shall be taken before any backfill is placed and again after completion of the earth fill. Joint gap shall be recorded to the nearest 1/16 inch at the four quarter points and identified as to location (T-top, B-bottom, L-left, and R-right.
- (vi) The elevation at joint inverts shall be determined and recorded, together with the dates the elevations were taken, on the principal spillway layout as-built drawing for all articulated conduit structures. These measurements may be determined by profiling the top of the pipe, after it is in place before backfilling and converting to invert elevations. Joint invert elevations shall also be determined and recorded, together with the dates the elevations were taken, after completion of the earth fill on conduits 48 inches in diameter and larger.
- (vii) Inlet and outlet elevations of all surface water inlet pipe conduits installed shall be recorded on the as-built drawings.
- (viii) Mechanical features and commercially manufactured items installed, such as water control gates, shall be identified by manufacturer's name, model number and any other pertinent data to aid in future repair or replacement, such as order numbers or shop drawing numbers.

IN-512.52 (b) Geology

(3) On channel work, where on-site testing of soils is performed during construction, information will be provided on the as-built drawings showing the location of the soil sampled on the plan view and the accompanying soils log shown on the profile. The results of the procedure used to check for stability will be noted next to the soil log at the depth at which the soil was tested.

IN-512.52 (c) <u>Labeling</u>.

- (1) Each sheet of the as-built plans is to be clearly marked "AS-BUILT". The date of completion of construction and any subsequent alteration is to be indicated on each sheet.
- (2) The cover sheet for all project work should also show:
 - Name and address of contractor;
 - Contract number and date; and
 - Name of government or contracting officer's representative and inspector.
- (3) The cover sheet for non-project work should also show:
 - Name of person making the layout;
 - Name and address of contractor;
 - Certification that practice meets standards and specifications; and
 - Name and signature of responsible engineer/technician.

IN-512.52 (d) Checking

For Class V-VIII jobs and other jobs referred to in 512.51 (a):

(1) The field/project engineer shall be responsible for the complete, accurate and timely preparation of the as-built drawings. The names of the contractor, field/project engineer and the construction inspector or responsible technician shall be shown on the drawings.

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- (2) The official copy of the as-built plans shall be submitted to the State Conservation Engineer (SCE), not later than 90 days after construction is completed.
- (3) The State Construction Engineer shall review and approve the as built drawings.
- (4) For Class IV and smaller jobs referred to in 512.51 (b), a person with the appropriate design approval authority for the practice shall sign the cover sheet to indicate approval and submit the official copy of the as-built plans to the District Conservationist or his/her designee.

IN-512.52 (e) Reproduction

- (7) For Class V-VIII jobs and other jobs referred to in 512.51 (a):
 - (a) The State Construction Engineer shall be responsible for obtaining required reproductions.
 - (b) Copies of the as-built drawings shall be distributed to:
 - State Office Engineering Staff;
 - Field Engineer;
 - Sponsor(s);
 - IDNR Division of Water (if they issued a permit to construct); and
 - Others as necessary.
- (8) For Class IV and smaller jobs referred to in 512.51 (b):
 - (a) The District Conservationist or his/her designee shall be responsible for obtaining required reproductions.
 - (b) Copies of the as-built drawings shall be distributed within 30 days after construction is certified as complete to:
 - Field office case file; and
 - Others as necessary